

Beck.

The adjustable differential pressure switches.



Differential pressure switch 930.8x Climair®

with adjustable switching pressure



Applications

Adjustable differential pressure switch for monitoring overpressure, vacuum and differential pressure of air or other non-combustible, non-aggressive gases. Possible fields of application include:

- Monitoring air filters and ventilators
- Monitoring industrial cooling-air circuits
- Overheating protection for fan heaters
- Monitoring flows in ventilation ducts
- Controlling air and fire-protection flaps
- Frost protection for heat exchangers

Versions

With this pressure switch the switching pressure can be adjusted without a pressure gauge using a scaled adjustment knob. The switching differential can also be adjusted with a screwdriver.

Type	Adjustment range for upper switching pressure from to	Switching differential set to	Tolerance for upper and lower switching pressure
930.80	20 300 Pa	10 Pa	± 15%
930.84	30 400 Pa	15 Pa	± 15%
930.83	50 500 Pa	20 Pa	± 15%
930.85	200 1000 Pa	100 Pa	± 15%
930.86	500 2500 Pa	150 Pa	± 15%
930.87	1000 5000 Pa	250 Pa	± 15%

Switching pressure specifications apply to vertical installation which is also the recommended position with pressure-pipe connections pointing downwards. If the switches are installed horizontally with AMP connection terminals uppermost, the switching values are approx. 20 Pa higher.

Maximum operating pressure

10 kPa for all pressure ranges.

Medium

Air, non-combustible and non-aggressive gases.

Temperature range

Medium and ambient temperature from -20°C to $+85^{\circ}\text{C}$.
Storage temperature from -40°C to $+85^{\circ}\text{C}$.

Diaphragm material

Silicone, tempered at 200°C , free of gas emissions.
Other materials available on request.

Pressure connections

2 plastic pipe connection pieces (P1 and P2), external diameter 6.0 mm:

P1 for connection to higher pressure (marked +)

P2 for connection to lower pressure (marked -)

Housing materials

Switch body made of PA 6.6.

Cover made of PS.

Weight

With cover 150 g

Without cover 110 g

Mechanical working life

Over 10^6 switching operations.

Electrical rating

Standard version

max. 1.0 A (0.4 A) / 250 VAC

Low-voltage version

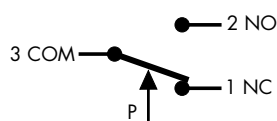
max. 0.1 A / 24 VDC

Electrical connections

AMP flat plug 6.3x0.8 mm in accordance with DIN 46244 or push-on screw terminals.

Cable conduit with cable strain relief.

Arrangement of contacts



1 Break contact

2 Operating contact

3 Power supply line

Protection category

IP 54 with cover

IP 00 without cover

CE Conformity

each depending on technical specification: Low Voltage Directive 2006/95/EC; RoHS Directive 2011/65/EC; Gas Appliance Directive 90/396/EC; ATEX- Directive 94/9/EC; ANSI UL508; CSA.

Accessories

See order matrix.

Order matrix

Pressure ranges	20 to 300 Pascal (0.2 to 3.0 mbar)	930.8	0						
	30 to 400 Pascal (0.3 to 4.0 mbar)								4
	50 to 500 Pascal (0.5 to 5.0 mbar)								3
	200 to 1000 Pascal (2.0 to 10.0 mbar)								5
	500 to 2500 Pascal (5.0 to 25.0 mbar)								6
	1000 to 5000 Pascal (10 to 50 mbar)								7
Switching contacts	gold-plated for low voltages, screw terminals enclosed						1		
	up to maximum 1.0 A (0.4) / 250 VAC, screw terminals enclosed						2		
	up to maximum 1.0 A (0.4) / 250 VAC with 6.3x0.8 mm flat plugs						3		
	gold-plated for low voltages with 6.3x0.8 mm flat plugs						4		
Fitting method	mounted directly without bracket						2		
Adjustment knob	scale in mbar						1		
	scale in Pascal						2		
	scale in Pascal and inWC						3		
IP protection category	IP 54 with cable conduit M16							5	
	IP 54 with cable conduit M20x1.5							2	
	IP 54 with cable conduit NPT1/2"							3	
	IP 00 without cover							4	
Packaging	bulk packed, 45 pcs. per carton							1	
	bulk packed, folding boxes included							2	
	individually boxed							3	
Accessories	without accessories								1
	with S-shaped metal mounting bracket 6402								2
	with L-shaped metal mounting bracket 6401								3
	with Climaset® 6555								4
	with Climaset® 6550								5
	with S-shaped metal mounting bracket 6402 and Climaset® 6555								6
	with S-shaped metal mounting bracket 6402 and Climaset® 6550								7
	with L-shaped metal mounting bracket 6401 and Climaset® 6555								8
	with L-shaped metal mounting bracket 6401 and Climaset® 6550								9
	with S-shaped snap-on plastic bracket 6482								A
	with L-shaped snap-on plastic bracket 6481								B
	with S-shaped snap-on plastic bracket 6482 and Climaset® 6555								C
	with S-shaped snap-on plastic bracket 6482 and Climaset® 6550								D
	with L-shaped snap-on plastic bracket 6481 and Climaset® 6555								E
with L-shaped snap-on plastic bracket 6481 and Climaset® 6550								F	

Accessories

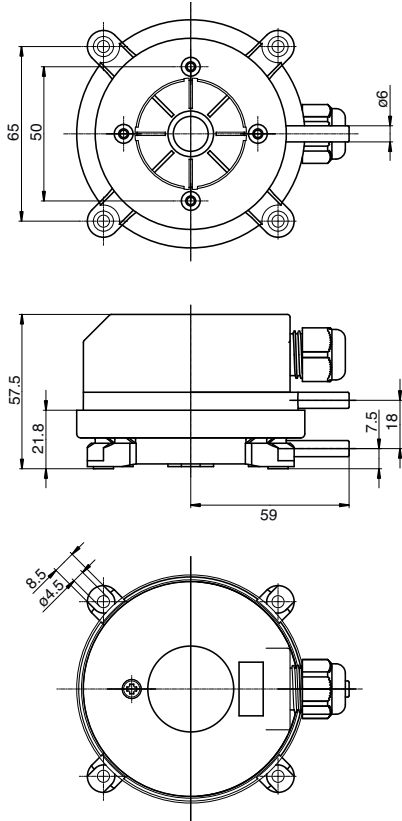
Metal mounting bracket S-shaped	Article No. 6402
Metal mounting bracket L-shaped	Article No. 6401
Snap-on plastic bracket S-shaped	Article No. 6482
Snap-on plastic bracket L-shaped	Article No. 6481
Climaset® consisting of 2 m PVC hose and 2 plastic tubes	Article No. 6555
Climaset® consisting of 2 m Silicone hose and 2 plastic tubes	Article No. 6557
Climaset® consisting of 2 m PVC hose and 2 angled metal pipes	Article No. 6550
Climaset® consisting of 2 m Silicone hose and 2 angled metal pipes	Article No. 6556
Set consisting of three push-on screw terminals	Article No. 6415
Plastic tube for Climaset® 6555	Article No. 6551
Angled metal pipe for Climaset® 6550	Article No. 6552
Rubber grommet for Climaset® 6550	Article No. 6553
Roll with 100 m PVC hose	Article No. 6424
M16 cable conduit including sealing and counter screw	Article No. 6562
M20x1.5 cable conduit including sealing and counter screw	Article No. 6568
NPT1/2" cable conduit without counter parts	Article No. 6561
Cardbox for single packing (without accessories)	Article No. 6428
Cardbox for single packing (with accessories)	Article No. 6429

Differential pressure switches

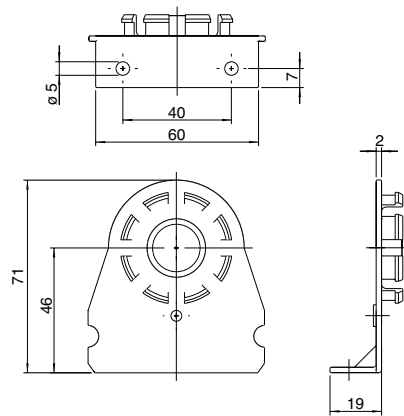
930.8x Climair®

with adjustable switching pressure

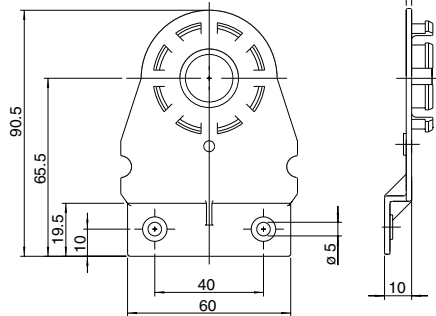
930.8x Climair®



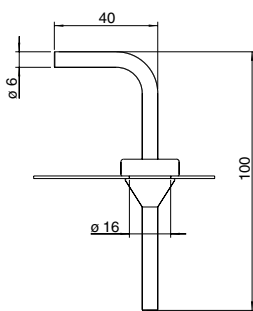
Mounting bracket 6481



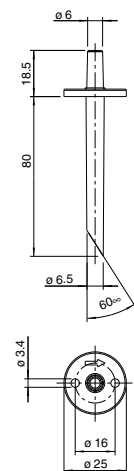
Mounting bracket 6482



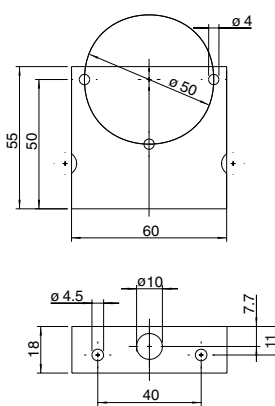
**Climaset®
6550/6556**



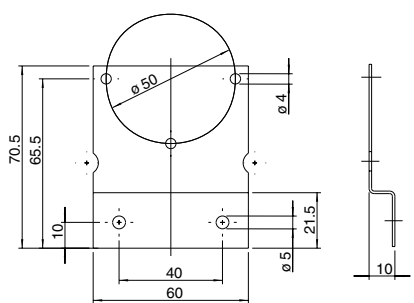
**Climaset®
6555/6557**



Mounting bracket 6401



Mounting bracket 6402



Beck GmbH
Druckkontrolltechnik
P.O. Box 11 31
D-71140 Steinenbronn
Telephone +49 (71 57) 52 87-0
Telefax +49 (71 57) 52 87-83
e-mail sales@beck-sensors.com
http://www.beck-sensors.com